



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 7, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Kendon Corporation / 035-17266-00064

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 9/16/03



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October 7, 2003

Mr. Daniel Opie
Kendon Corporation
P.O. Box 2343
Muncie, Indiana 47307

Re: 035-17266-00064
First Minor Permit Revision to
MSOP 035-10273-00064

Dear Mr. Opie:

Kendon Corporation was issued a minor source operating permit on October 17, 2002 for a gray iron foundry. A letter requesting a revision to this permit was received on May 9, 2003. Pursuant to the provisions of 326 IAC 2-6.1-6, a minor permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of adding a new mold blaster with a dust collector for control.

The following construction conditions are applicable to the proposed project:

1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Delaware County
Delaware County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Ampil
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner



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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Kendon Corporation
3904 South Hoyt Avenue
Muncie, Indiana 47307**

(herein known as the Permittee) is hereby authorized to *construct and* operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

| | |
|--|--|
| Operation Permit No.: MSOP 035-10273-00064 | |
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: October 17, 2002 Expiration Date: October 17, 2007 |

| | |
|---|---------------------------------|
| First Minor Permit Revision No.: 035-17266-00064 | Pages affected: 5, 8, 17, 19-22 |
| Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: October 7, 2003 |

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary gray iron foundry.

Authorized individual: Plant Manager
Source Address: 3904 South Hoyt Avenue, Muncie, IN47307
Mailing Address: PO Box 2343, Muncie, IN 47307
Phone Number: 765-282-1515
SIC Code: 3312
County Location: Delaware
Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit (MSOP)
Minor Source, under PSD
Minor Source, Section 112 of the Clean Air Act
1 of 28 Source Categories

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

One (1) gray iron foundry, with a maximum metal melting rate of one (1) ton per hour and consists of the following processes:

- (1) One (1) sand handling process, with a maximum raw material throughput of ten (10) tons per hour, controlled by one (1) baghouse (Torit DF T2 8) and exhausts to the general exhaust vent designated as EP-03.
- (2) One (1) melting process, including the melting of gray iron by two (2) electric induction furnaces (designated as EU-01 and EU-02), charge handling, pouring and cooling, with a maximum metal throughput of one (1) ton per hour and exhausts to a stack designated as EP-01 and EP-02 respectively.
- (3) One (1) cleaning and finishing process with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (4) One (1) shakeout process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (5) One (1) pouring and casting process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.

- (6) One (1) cooling process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (7) One (1) oxyacetylene station, with a maximum metal cutting rate of thirty (30) inches per minute and exhausts to the atmosphere.
- (8) One (1) initial grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by a dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (9) One (1) initial blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (10) One (1) final grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (11) One (1) final blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (12) One (1) mold blaster, constructed in 2003, with a maximum throughput rate of 1,500 pounds of mold segments per hour and a maximum abrasive (Aluminum Oxide) usage of 1,392 lbs/hr, using a dust collector for control, and exhausting inside the building.

SECTION B

GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any

permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C

SOURCE OPERATION CONDITIONS

| |
|---------------|
| Entire Source |
|---------------|

C.1 PSD Minor Source Status [326 IAC 2-2]

- (a) The total source potential to emit of PM is less than 100 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) will not apply.
- (b) Any change or modification which may increase potential to emit to 100 tons per year from this source, shall cause this source to be considered a major source under PSD and 326 IAC 2-2, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.12 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 1-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so

long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

(Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator=s standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit,

and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

One (1) gray iron foundry, with a maximum metal melting rate of one (1) ton per hour and consists of the following processes:

- (1) One (1) sand handling process, with a maximum raw material throughput of ten (10) tons per hour, controlled by one (1) baghouse (Torit DF T2 8) and exhausts to the general exhaust vent designated as EP-03.
- (2) One (1) melting process, including the melting of gray iron by two (2) electric induction furnaces (designated as EU-01 and EU-02), charge handling, pouring and cooling, with a maximum metal throughput of one (1) ton per hour and exhausts to a stack designated as EP-01 and EP-02 respectively.
- (3) One (1) cleaning and finishing process with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (4) One (1) shakeout process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (5) One (1) pouring and casting process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (6) One (1) cooling process, with a maximum metal throughput of one (1) ton per hour and exhausts to the general exhaust vent designated as EP-03.
- (7) One (1) oxyacetylene station, with a maximum metal cutting rate of thirty (30) inches per minute and exhausts to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.1.1 PSD Minor Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit any criteria pollutant is limited to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification in the equipment covered in this permit which may increase the potential to emit to 100 tons per year, shall require a PSD permit pursuant to 326 IAC 2-2 and 40 CFR 52.21, before such change may occur.
- (c) The Particulate Matter (PM) emissions from various operations shall be limited as follows:

| Process/facility | PM (tons/year) | PM (lb/hour) |
|---------------------------|----------------|--------------|
| Scrap and Charge Handling | 2.63 | 0.60 |

| Process/facility | PM (tons/year) | PM (lb/hour) |
|---------------------------------|----------------|--------------|
| (2) Electric Induction Furnaces | 3.94 | 0.90 |
| Pouring/ Casting | 18.4 | 4.20 |
| Castings Cooling | 6.13 | 1.40 |
| Castings Shakeout | 14.02 | 3.20 |
| Castings Cleaning and Finishing | 2.53 | 0.58 |
| Core Making | 3.94 | 0.90 |
| Mold Making | 3.94 | 0.90 |
| Sand Handling | 1.6 | 0.37 |
| Flame Cutting | 0.64 | 0.15 |

- (d) The raw material throughput for the Sand Handling operation shall be limited to 87,600 tons per 12 consecutive months period rolled on monthly basis.

This will ensure limiting the PM emissions from the entire source to below one hundred (100) tons per 12 month period the 326 IAC 2-2 (PSD) major source level.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions shall be limited as follows:

| Process | PM limit (pounds per hour) |
|-------------------------------------|----------------------------|
| two (2) electric induction furnaces | 2.05 each |
| sand handling operation | 41.0 |
| pouring and casting operation | 20.4 |
| Shakeout operation | 20.4 |
| Cooling operation | 20.4 |
| cleaning and finishing operation | 4.1 |

These limitations are derived based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,} \\ P = \text{process weight in tons per hour.}$$

D.1.3 New Facilities, General Reduction Requirements [326 IAC 8-1-6]

- (a) Potential VOC emissions from each facility at this source are less than 25 tons per year, therefore, the requirements of 326 IAC 8-1-6 will not apply in this case.
- (b) Any change or modification in the equipment covered in this permit which may increase the potential to emit to 25 tons VOC per year, shall require the approval of a Best Available Control Technology (BACT) plan, pursuant to 326 IAC 8-1-6, before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.5 Particulate Matter (PM)

The Baghouses Torit DF T2-8 for PM control shall be in operation and control emissions from the Sand Handling operation at all times that the Sand Handling is being performed.

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

(Within 6 months after issuance of this permit, in order to demonstrate compliance with the sand handling process limit in Condition D.1.1 (c), the Permittee shall perform PM testing on sand handling operation utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the sand handling operation stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Sand Handling operation, at least once per shift when the Sand Handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.1.9 Baghouse Inspections

An inspection shall be performed within the last month of each calendar quarter of all bags controlling the Sand Handling operation. All defective bags shall be replaced.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C- Malfunctions Report). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C – Malfunctions Report).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records of visible emission notations of the Sand Handling operation stack exhaust once per shift.
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain the per shift records of the inlet and outlet differential static pressure during normal operation.
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.10 and the dates the vents are redirected.
- (d) To document compliance with Condition D.1.1 (d), the Permittee shall maintain records of the raw material throughput for the Sand Handling operation.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (8) One (1) initial grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (9) One (1) initial blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (10) One (1) final grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (11) One (1) final blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.2.1 Exemption Applicability [326 IAC 2-1.1-3 (e)(26)]

Pursuant to 326 IAC 2-1.1-3 (e)(26) the Baghouse Uniblast DC-100 with grain loading less than or equal to 0.03 grains per actual cubic foot and exhaust flow rate less than or equal to 4000 actual cubic feet per minute should be in operation at all time the grinding and blasting processes are in operation. This will ensure limiting the PM₁₀ emissions from the entire source to below one hundred (100) tons per 12 month period the 326 IAC 2-2 (PSD) major source level.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (12) One (1) mold blaster, constructed in 2003, with a maximum throughput rate of 1,500 pounds of mold segments per hour and a maximum abrasive (Aluminum Oxide) usage of 1,392 lbs/hr, using a dust collector for control, and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.3.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD), the Permittee shall limit the particulate emissions from the mold blaster to:

- (a) Less than 0.13 lbs/hr for PM, which is equivalent to 0.56 tons/yr of PM emissions.
- (b) Less than 0.013 lbs/hr for PM₁₀, which is equivalent to 0.06 tons/yr of PM₁₀ emissions.

Combined with the PM and PM₁₀ emissions from other existing units, the potential to emit PM and PM₁₀ emissions from the entire source is less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.3.2 Minor Permit Revisions [326 IAC 2-6.1-6(g)]

Pursuant to 326 IAC 2-6.1-6(g)(5)(C) (Minor Permit Revisions), the dust collector equipped with the mold blaster shall comply with the following limits when the mold blaster is in operation:

- (a) At least 99% control efficiency; and
- (b) No visible emissions.

D.3.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from the mold blaster shall not exceed 3.38 pounds per hour when operating at a process weight of 1,500 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Determination Requirements

D.3.4 PM and PM₁₀ Emissions

In order to comply with Conditions 3.1 and D.3.3, the dust collector for PM and PM₁₀ control shall be in operation at all times when the mold blaster is in operation.

Kendon Corporation
Muncie, Indiana
Permit Reviewer: ERG/GS

First Minor Permit Revision No.: 035-17266-00064
Revised by: ERG/YC

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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

| | |
|----------------------|-------------------------------|
| Company Name: | Kendon Corporation |
| Address: | 3904 South Hoyt Avenue |
| City: | Muncie, Indiana 47307 |
| Phone #: | (765) 282-1515 |
| MSOP #: | 035-10273-00064 |

I hereby certify that Kendon Corporation is

☒ still in operation.

☐ no longer in operation.

I hereby certify that Kendon Corporation is

☒ in compliance with the requirements of
MSOP 035-10273-00064

☐ not in compliance with the requirements of
MSOP 035-10273-00064

| |
|---------------------------------------|
| Authorized Individual (typed): |
| Title: |
| Signature: |
| Date: |

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

| |
|-----------------------|
| Noncompliance: |
| |

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____

LOCATION: (CITY AND COUNTY) _____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Kendon Corporation
Muncie, Indiana
Permit Reviewer: ERG/GS

First Minor Permit Revision No.: 035-17266-00064
Revised by: ERG/YC

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**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Revision to a Minor Source Operating Permit (MSOP)

Source Background and Description

| | |
|---------------------------------|---|
| Source Name: | Kendon Corporation |
| Source Location: | 3904 South Hoyt Avenue, Muncie, Indiana 47307 |
| County: | Delaware |
| SIC Code: | 3312 |
| Operation Permit No.: | MSOP 035-10273-00064 |
| Operating Permit Issuance Date: | October 17, 2002 |
| Minor Permit Revision No.: | 035-17266-00064 |
| Permit Reviewer: | ERG/YC |

The Office of Air Quality (OAQ) has reviewed an application from Kendon Corporation relating to the construction and operation of the following emission unit and control device:

- (12) One (1) mold blaster, constructed in 2003, with a maximum throughput rate of 1,500 pounds of mold segments per hour and a maximum abrasive (Aluminum Oxide) usage of 1,392 lbs/hr, using a dust collector for control, and exhausting inside the building.

History

On May 9, 2003, Kendon Corporation submitted a permit revision application to the OAQ requesting to add one mold blaster to their existing source. Kendon Corporation is an existing gray iron foundry. This source was permitted to construct and operate in MSOP 035-10273-00064, issued on October 17, 2002.

Existing Approvals

The source was issued a MSOP 035-10273-00064 on October 17, 2002. There has been no other air approval issued to this source since the issuance of MSOP 035-10273-00064.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 9, 2003, with additional information received on July 3, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1).

Potential To Emit of Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 55.8 |
| PM-10 | 5.58 |
| SO ₂ | -- |
| VOC | -- |
| CO | -- |
| NO _x | -- |

Potential to Emit Before Control After Revision

The table below summarized the total potential to emit of all the emission units before control.

| Process/facility | Potential to Emit (tons/year) | | | | | | |
|--|----------------------------------|-------|-----------------|------|-----|-----------------|---|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| PTE of Mold Blaster before Control | 55.8 | 5.58 | - | - | - | - | - |
| *Total PTE of the Existing Units before Control | 360 | 77.4 | 0.09 | 5.87 | - | 4.42 | 0.38 |
| Total PTE before Control of the Entire Source after Revision | 412 | 83.0 | 0.09 | 5.87 | - | 4.42 | 0.38 |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 10 for a single HAP and 25 for any combination of HAPs. |

*Note: The PTE of the existing units before control is from the Technical Support Document (TSD) for MSOP #035-10273-00064, issued on October 17, 2003.

The existing source is subject to the minor source operating permit program with potential to emit of all criteria pollutants before control less than the Title V major source thresholds. After adding the mold blaster, the potential to emit criteria pollutants before control from the entire source is still less than the Title V major source thresholds. Therefore, this source will maintain their MSOP operating status after this revision.

Potential to Emit After Control After Revision

The table below summarizes the total potential to emit, reflecting all limits, of the emission units after control. The control equipment is considered federally enforceable only after issuance of this Permit Revision.

| Process/facility | Potential to Emit (tons/year) | | | | | | |
|---|----------------------------------|-------------------|-----------------|------|-----|-----------------|------|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Mold Blaster after Control | Less than 0.56 | Less than 0.06 | - | - | - | - | - |
| *Total PTE of the Existing Units after Control | Less than 57.8 | Less than 39.3 | 0.09 | 5.87 | - | 4.42 | 0.38 |
| Total PTE of the Entire Source after Revision | Less than 58.4 | Less than 39.4 | 0.09 | 5.87 | - | 4.42 | 0.38 |
| PSD Major Source Thresholds | 100 | 100 | 100 | 100 | 100 | 100 | NA |

*Note: The PTE of the existing units after control is from the Technical Support Document (TSD) for MSOP #035-10273-00064, issued on October 17, 2003.

This modification to an existing minor PSD source is not major because the potential to emit from this modification is less than PSD major modification thresholds. The source will be able to maintain their PSD minor source status after this revision. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Justification for Revision

This revision is being performed through a MSOP Minor Permit Revision pursuant to 326 IAC 2-6.1-6(g)(5) as the potential to emit PM is limited to less than 25 tons per year by using a dust collector with 99% of control efficiency and no visible emissions.

County Attainment Status

The source is located in Delaware County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | Attainment |
| SO ₂ | Attainment |
| NO ₂ | Attainment |
| Ozone | Attainment |
| CO | Attainment |
| Lead | Attainment |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Delaware County has been designated as attainment or unclassifiable for

ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Delaware County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
Since this type of operation is in one of the 28 listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

| Pollutant | Emissions (ton/yr) |
|-----------------|-----------------------|
| PM | 57.8 |
| PM10 | 39.3 |
| SO ₂ | 0.09 |
| VOC | 5.87 |
| CO | -- |
| NO _x | 4.42 |

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 100 tons per year, and it is in one of the 28 listed source categories.
- (b) These emissions were based on the Technical Support Document (TSD) for MSOP 035-10273-00064, issued October 17, 2002.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit revision 035-17266-00064, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this revision.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this revision.

State Rule Applicability - Mold Blaster

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 1974 and modified in 2002 and 2003 (this modification). This source is in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and has potential to emit PM before control greater than 100 tons/yr and potential to emit other pollutants less than 100 tons/yr. The PM emissions from the existing units were limited to less than 100 tons/yr in MSOP #035-10273-00064, issued on October 17, 2002.

Pursuant to 326 IAC 2-2 (PSD), the PM and PM10 emissions from the proposed mold blaster shall be limited to:

- (a) Less than 0.13 lbs/hr for PM, which is equivalent to 0.57 tons/yr of PM emissions.
- (b) Less than 0.013 lbs/hr for PM10, which is equivalent to 0.06 tons/yr of PM10 emissions.

According to the emission calculations (see Appendix A), the potential to emit PM and PM10 from the mold blaster after control is less than the limits above. The use of dust collector with 99% control efficiency ensures compliance with these limits.

Combined with the PM and PM10 emissions from other existing units, the PM and PM10 emissions from the entire source are each limited to less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-6.1-6(g)(5) (Minor Permit Revisions)

Pursuant to 326 IAC 2-6.1-6(g)(5) (Minor Permit Revisions), the dust collector used to control the particulate emissions from the new mold blaster shall comply with the following limits when the new mold blaster is in operation:

- (a) At least 99% control efficiency; and
- (b) No visible emissions.

The proposed dust collector has a control efficiency higher than 99% and vents inside the building. Therefore, this dust collector is in compliance with 326 IAC 2-6.1-6(g)(5).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-3-2 (Manufacturing Processes)

Particulate emissions from the mold blasters shall not exceed 3.38 lbs/hr when the process weight rate is 1,500 lbs/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

According to the emission calculations (see Appendix A), the potential to emit PM from the mold blaster after control is less than the limit above. Therefore, the proposed mold blaster is in compliance with 326 IAC 6-3-2. The use of dust collector with 99% control efficiency ensures compliance with this limit.

Proposed Changes

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

. . . .

- (12) One (1) mold blaster, constructed in 2003, with a maximum throughput rate of 1,500 pounds of mold segments per hour and a maximum abrasive (Aluminum Oxide) usage of 1,392 lbs/hr, using a dust collector for control, and exhausting inside the building.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (12) One (1) mold blaster, constructed in 2003, with a maximum throughput rate of 1,500 pounds of mold segments per hour and a maximum abrasive (Aluminum Oxide) usage of 1,392 lbs/hr, using a dust collector for control, and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.3.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD), the Permittee shall limit the particulate emissions from the mold blaster to:

- (a) Less than 0.13 lbs/hr for PM, which is equivalent to 0.56 tons/yr of PM emissions.
- (b) Less than 0.013 lbs/hr for PM₁₀, which is equivalent to 0.06 tons/yr of PM₁₀ emissions.

Combined with the PM and PM₁₀ emissions from other existing units, the potential to emit PM and PM₁₀ emissions from the entire source is less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.3.2 Minor Permit Revisions [326 IAC 2-6.1-6(g)]

Pursuant to 326 IAC 2-6.1-6(g)(5)(C) (Minor Permit Revisions), the dust collector equipped with the mold blaster shall comply with the following limits when the mold blaster is in operation:

- (a) At least 99% control efficiency; and
- (b) No visible emissions.

D.3.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from the mold blaster shall not exceed 3.38 pounds per hour when operating at a process weight of 1,500 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.3.4 PM and PM10 Emissions

In order to comply with Conditions 3.1 and D.3.3, the dust collector for PM and PM10 control shall be in operation at all times when the mold blaster is in operation.

Upon further review, IDEM, OAQ has made the following changes to the permit:

C.1 PSD Minor Source Status [326 IAC 2-2] ~~{40 CFR 52.21}~~

- (a) The total source potential to emit of PM is less than 100 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) ~~and 40 CFR 52.21~~ will not apply.
- (b) Any change or modification which may increase potential to emit to 100 tons per year from this source, shall cause this source to be considered a major source under PSD ; ~~and~~ 326 IAC 2-2 ~~and 40 CFR 52.21~~, and shall require approval from IDEM, OAQ prior to making the change.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-3 6.1]:

One (1) gray iron foundry, with a maximum metal melting rate of one (1) ton per hour and consists of the following processes:

.....

Emission Limitations and Standards [326 IAC 2 -~~8-4~~(1) 6.1]

D.1.6 Testing Requirements ~~[326 IAC 2-8-5 (a)(1), (4)]~~ [326 IAC 2-1.1-11]

(Within 6 months after issuance of this permit, in order to demonstrate compliance with the sand handling process limit in Condition D.1.1 (c), the Permittee shall perform PM testing on sand handling operation utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC ~~2-8-4~~ 2-5.1-3(e)(2)] [326 IAC ~~2-8-5(a)(1)~~ 2-6.1-5(a)(2)]

Record Keeping and Reporting Requirement [326 IAC ~~2-8-4(3)~~ 2-5.1-3(e)(2)] [326 IAC ~~2-8-16~~ 2-6.1-5(a)(2)]

Emission Limitations and Standards [326 IAC ~~2-8-4(1)~~ 2-6.1]

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC ~~2-8-4(10)~~ 2-6.1]:

- (8) One (1) initial grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (9) One (1) initial blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (10) One (1) final grinding process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by dust collector(Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.
- (11) One (1) final blasting process, with a maximum metal throughput of one-half (1/2) ton per hour, controlled by one (1) baghouse (Uniblast DC-100) and exhausts to the general exhaust vent designated as EP-03.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC ~~2-8-4(1)~~ 2-6.1]

Conclusion

The construction and operation of this mold blaster shall be subject to the conditions of the attached proposed Minor Permit Revision 035-17266-00064.